

***Menemerus fagei* new to Malta and Europe (Araneae: Salticidae)****Mario Freudenschuss, Tobias Bauer & Arnold Sciberras**

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**Abstract.** The first record of *Menemerus fagei* Berland & Millot 1941 (Araneae, Salticidae) from the Maltese Islands is reported and discussed. It is the 20<sup>th</sup> jumping spider species for Malta and a new record for Europe.

**Keywords:** Gozo, jumping spider, Maltese Islands

The Maltese islands are located in the centre of the Mediterranean, 96 km south of Sicily and 290 km from the coast of North Africa (Baldacchino et al. 1993). The Maltese archipelago consists of three large islands (Malta, Gozo and Comino). The total size of the Maltese islands is 316 km<sup>2</sup>. The geographical location of the Maltese islands gives them unique ecological characteristics, since the islands are located between Africa and Europe. They thus comprise a mixture of the biodiversity from both continents. European taxa dominate, but there are North African elements as well (Sciberras & Sciberras 2010, Sciberras et al. 2012a, 2012b).

The hitherto known spider fauna of the Maltese Islands comprises only 137 species in 31 families, including seven endemic species (Dandria et al. 2005). Salticidae are represented by 19 species. One species of this family has a very small distribution area: *Aelurillus schembrii* Cantarella, 1983). It has only been recorded from Malta and Sicily so far (Dandria et al. 2005).

Here we present a new species record of jumping spiders for Malta and Europe. The specimen in question was found on the island of Gozo. Photographs of the habitus and genitalia are presented (Figs 1-3). The specimen was identified using the revision of the spider genus *Menemerus* in Africa (Wesołowska 1999) and is deposited at the private collection of the first author.

***Menemerus fagei* Berland & Millot, 1941**

1♀, Malta, Gozo, Ghajnsielen (N36°01'12.27" E14°17'23.84"), 28.04.2012 (leg. A. Sciberras),

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(Fig. 4), 15 m a.s.l., Xatt l-Ahmar pocket Beach, under *Limbarda crithmoides* in a clayish habitat (Fig. 5), M. Freudenschuss det., W. Wesołowska vid.



**Fig. 1:** *Menemerus fagei*, habitus dorsal. – Photo: M. Freudenschuss



**Fig. 2:** *Menemerus fagei*, habitus lateral. – Photo: M. Freudenschuss



**Fig. 3:** *Menemerus fagei*, epigyne ventral. – Photo: M. Freudenschuss



Fig. 4: Map of Gozo with collection area.



Fig. 5: Locality of *Menemerus fagei*. – Photo: A. Sciberras

### Diagnosis

This species is one of the largest in the genus. Our specimen has a body length of 11.4 mm. The female is much larger than the male (Wesołowska 1999); colouration like the male but slightly lighter. Legs yellowish. Epigyne large, with two oval depressions. Partially plugged with waxy secretions (Fig. 3). Internal structures very strongly sclerotized, especially the entrance bowls (Fig. 3 and Wesołowska 1999). The epigynum does not resemble any other known female *Menemerus* species, thus confusion with other species of the genus can be excluded.

### Comments

Berland & Millot (1941) described this species on the basis of the female. The male was described by Wesołowska (1999). Prószyński (1989: sub *M. bivittatus*) published drawings of both sexes, but subsequently attached them to *M. fagei* (Prószyński 2003).

### Distribution

The known distribution range of the species is from West Africa to Yemen (Platnick 2013). The closest records to our find are from Israel (Prószyński 2003) and Egypt (Wesołowska 1999).

### Discussion

With 70 species, *Menemerus* a moderately species-rich genus within the salticids. The genus is distributed worldwide. The majority of the species have been recorded from Africa, with only a few species in Europe (total distribution according to Platnick 2013 and European country records according to Nentwig et al 2013):

- *M. animatus* O. P.-Cambridge, 1976: Greece
- *M. bivittatus* (Dufour, 1831): Senegal to Iraq; Europe: France, Italy, Portugal, Spain
- *M. dimidius* (Schmidt, 1976): Canary Is. [politically to Europe, but not geographically]
- *M. falsificus* Simon, 1868: Southern Europe: Bulgaria, Croatia, France, Switzerland
- *M. illigeri* (Audouin, 1826): Portugal, North Africa, Middle East, St. Helena
- *M. schutzae* Denis, 1961 [only the female is known]: France [the species is valid according to Platnick 2013, but considered a synonym of *Marpissa radiata* (Grube, 1859) in Prószyński 2013]
- *M. semilimbatus* (Hahn, 1829) [type species of the genus]: Canary Is. to Azerbaijan; Chile, Argentina, USA (introduced); Europe: Albania, Belarus, Bulgaria, Croatia, France, Greece, Italy, Macedonia, Moldavia, Portugal, Romania, Spain, Slovenia, Ukraine
- *M. taeniatus* (L. Koch, 1867): Mediterranean to Kazakhstan; Argentina [presumably introduced]; Europe: Bulgaria, Croatia, France, Greece, Italy, Portugal, Romania, Spain, Ukraine

With *M. fagei* we present a new species for Europe. The closest published record is from Egypt, the northernmost is from Israel. The new record from Malta supports the assumption that the species is more widespread in northern Africa. The epigynum of the females from Israel and Egypt differ slightly (Prószyński 2013). The specimen from Malta is of the African type. The species has already been collected in the west-Mediterranean sub-region (Wesołowska 1999), but these records have not yet been published (Wesołowska pers. comm.). For Malta this is the 20<sup>th</sup> species of jumping spiders.

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